

CLAIMS

Having thus described our invention, what we claim as new and desire to secure by Letters Patent is as follows:

- 1 1. A filter for use in a recirculating tank, comprising:
2 aggregate material; and
3 a mattress-like woven material encapsulating the aggregate material, a
4 weave of the mattress-like woven material being smaller than the aggregate
5 material thereby preventing migration of the aggregate material.
- 1 2. The filter of claim 1, wherein the aggregate material is synthetic particles.
- 1 3. The filter of claim 2, wherein the synthetic particles are propylene or
2 polychloride.
- 1 4. The filter of claim 2, wherein the synthetic particles have a specific gravity
2 of approximately .9 +/- 3%.
- 1 5. The filter of claim 4, wherein the synthetic particles prevent compaction of
2 the filter.
- 1 6. The filter of claim 1, wherein the aggregate material ranges in diameter
2 from .05mm to 1 ½ inches diameter.
- 1 7. The filter of claim 1, wherein the woven material is fabric or a synthetic
2 material.

1 8. The filter of claim 1, wherein the synthetic material is propylene or ethylene
2 clothing.

1 9. The filter of claim 1, wherein only a single sized aggregate is encapsulated
2 in the woven cloth.

1 10. A recirculating filter system adapted for use in a septic system,
2 comprising:
3 a tank;
4 at least one mattress-like filter placed within the tank, the mattress-like
5 filter having aggregate material sealed therein.

1 11. The recirculating filter system of claim 10, wherein at the at least one
2 mattress-like filter is at least two mattress-like filters.

1 12. The recirculating filter system of claim 11, wherein each of the mattress-
2 like filters have a different sized aggregate sealed therein.

1 13. The recirculating filter system of claim 12, wherein a finer sized aggregate
2 filled mattress-like filter of the at least two mattress-like filters is placed on top
3 of a larger sized aggregate filled mattress-like filter of the at least two
4 mattress-like filters within the tank.

1 14. The recirculating filter system of claim 10, wherein the aggregate material
2 is synthetic particles.

1 15. The recirculating filter system of claim 14, wherein the synthetic particles
2 are propylene or polychloride.

1 16. The recirculating filter system of claim 14, wherein the synthetic particles
2 have a specific gravity of approximately .9 +/- 3%.

1 17. The recirculating filter system of claim 10, wherein the at least one
2 mattress-like filter is made from fabric or a synthetic material.

1 18. The recirculating filter system of claim 17, wherein the synthetic material
2 is propylene or ethylene clothing.

1 19. The recirculating filter system of claim 18, wherein a weave of the fabric
2 or the synthetic material is small than a diameter of the aggregate material
3 sealed therein thus preventing migration thereof.

1 20. The recirculating filter system of claim 10, wherein the tank includes
2 troughs integrally formed in at least the bottom and sides thereof.

1 21. The recirculating filter system of claim 20, further comprising a sheet
2 placed over the troughs of the side of the tank.

1 22. The recirculating filter system 10, wherein the tank is a precast concrete or
2 a synthetic material.

1 23. The recirculating filter system of claim 22, wherein the tank includes a
2 flange and ribs disposed about a periphery thereof.